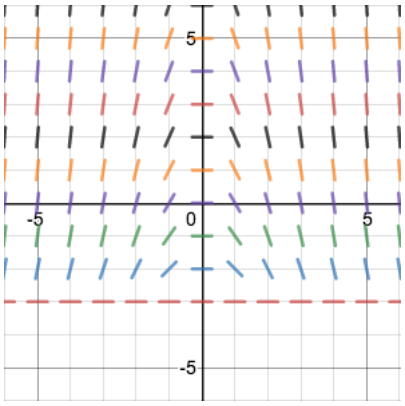
Math 211
Quiz 03

W 10 Jul 2019

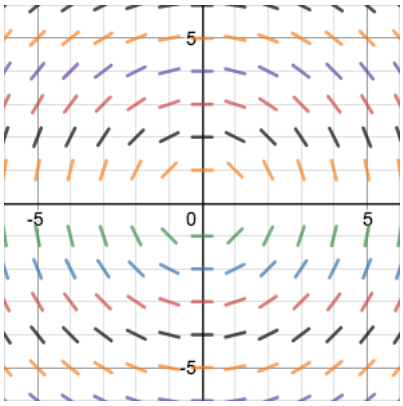
Your name: _____

Exercise

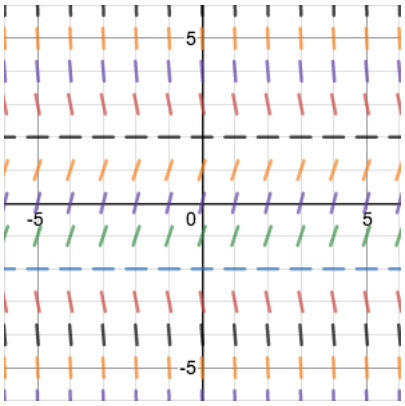
(2 pt) Matching : Write the number of the slope field next to its corresponding 1st-order ODE. *Hint:* Is there anywhere the ODE is not defined? Where are the equilibrium solutions, if any? What happens to the algebraic value of $\frac{dy}{dt} = f(t,y)$, and to the slope at (t,y) in the slope field, as we change y? as we change t?



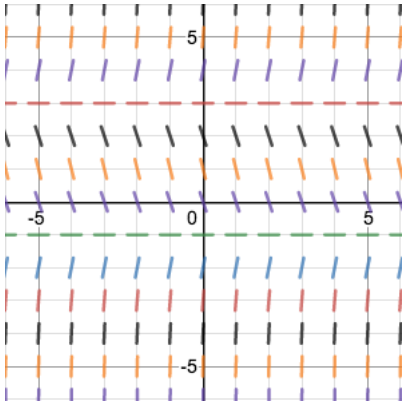
(1)



(2)



(3)



(4)

__(2)__ (a) $\dfrac{dy}{dt} = -\dfrac{t}{y}$

__(4)__ (b) $\dfrac{dy}{dt} = y^2 - 2y - 3$

__(3)__ (c) $\dfrac{dy}{dt} = -y^2 + 4$

__(1)__ (d) $\dfrac{dy}{dt} = -t\sqrt{y+3}$